FIG. 1: Data Packet Transport System

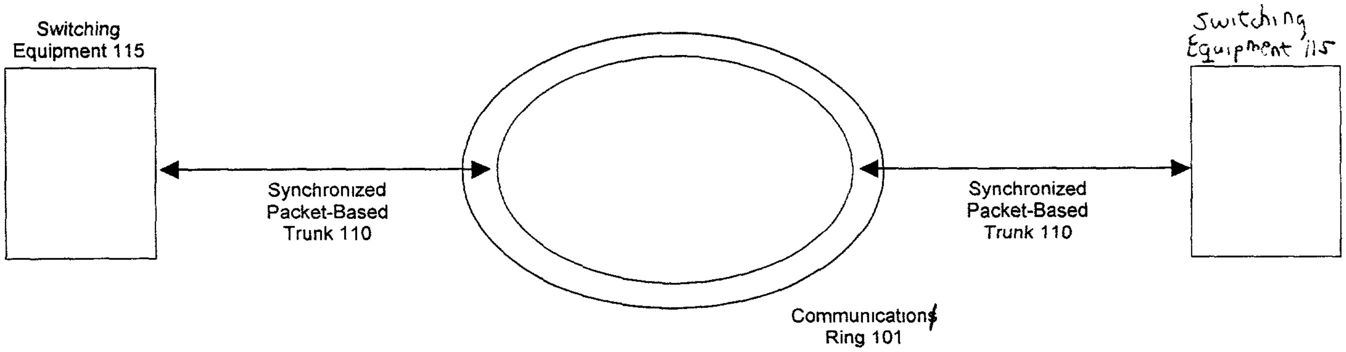


FIG. 2: Timing Diagram of Synchronized Packet-based Trunk

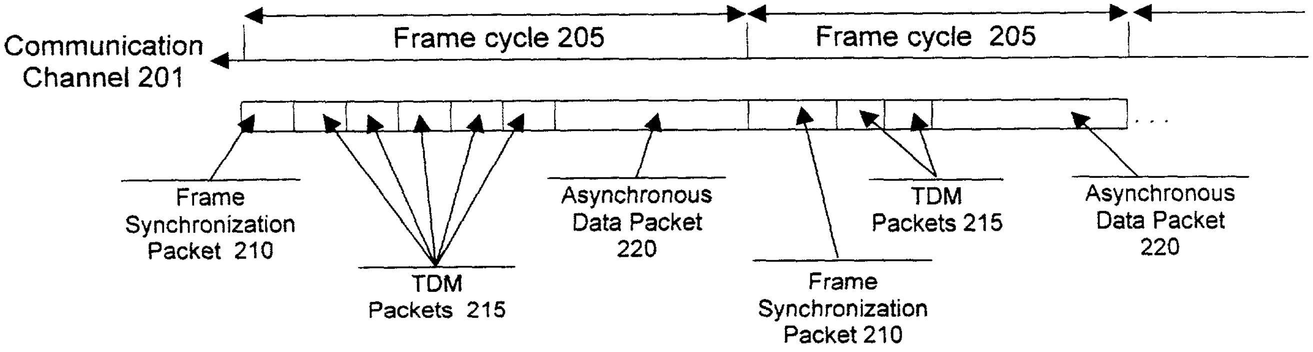


FIG. 3: Trunk Transmitter and Receiver

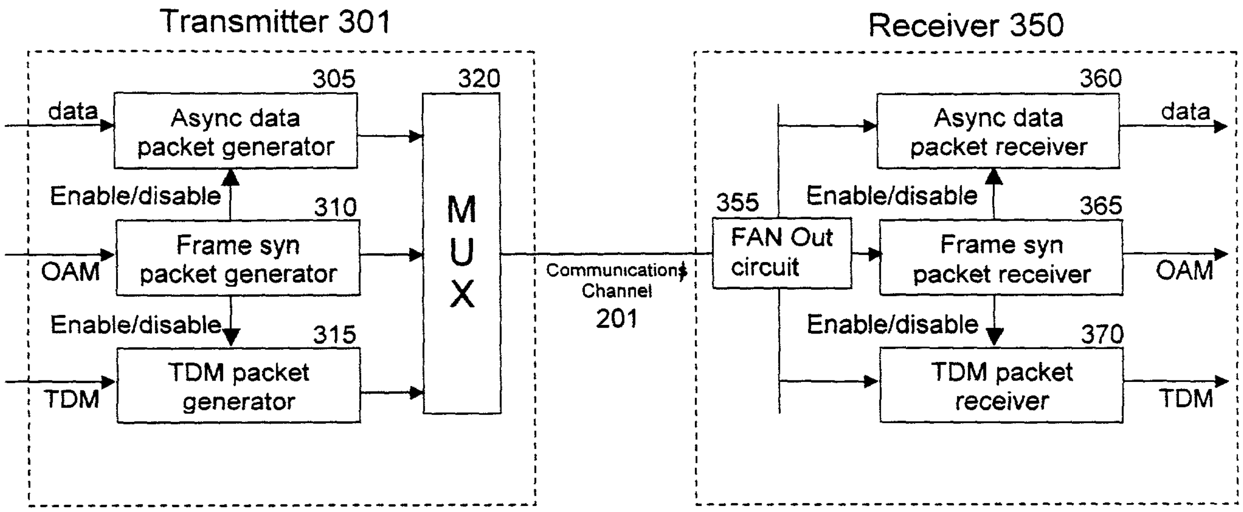


FIG. 4: Frame Synchronization Packet Format

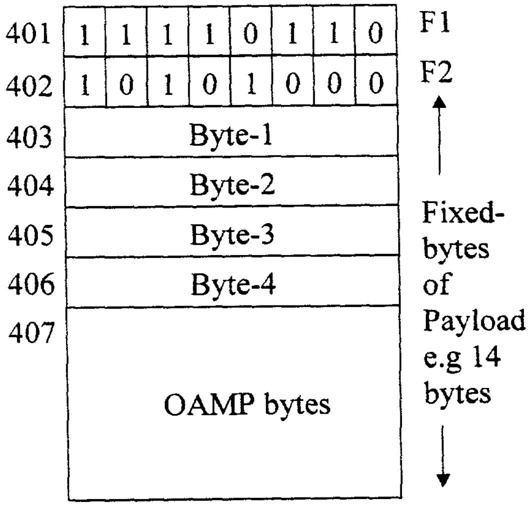


FIG. 5: TDM Packet Format

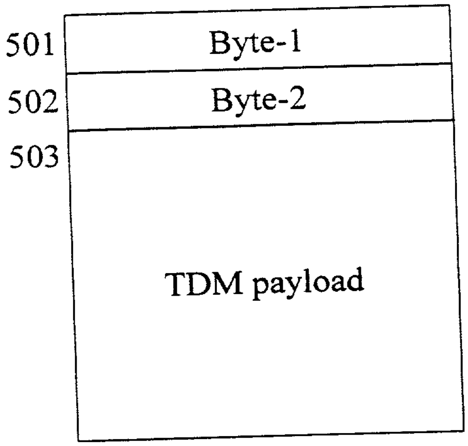


FIG. 6: Asynchronous Data Packet Format

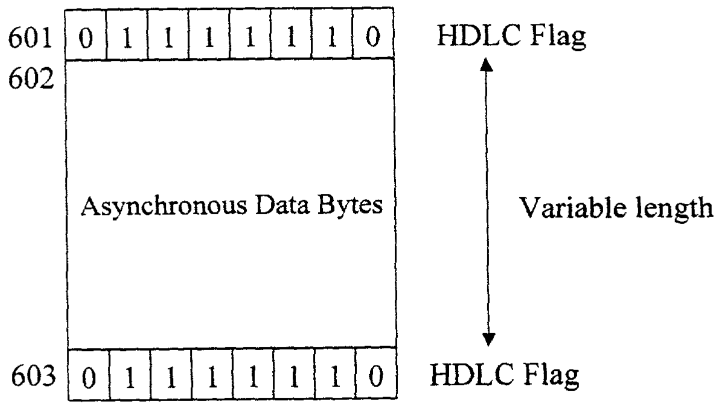


FIG. 7: Synchronized Packet-Based Trunk Receiver Operation

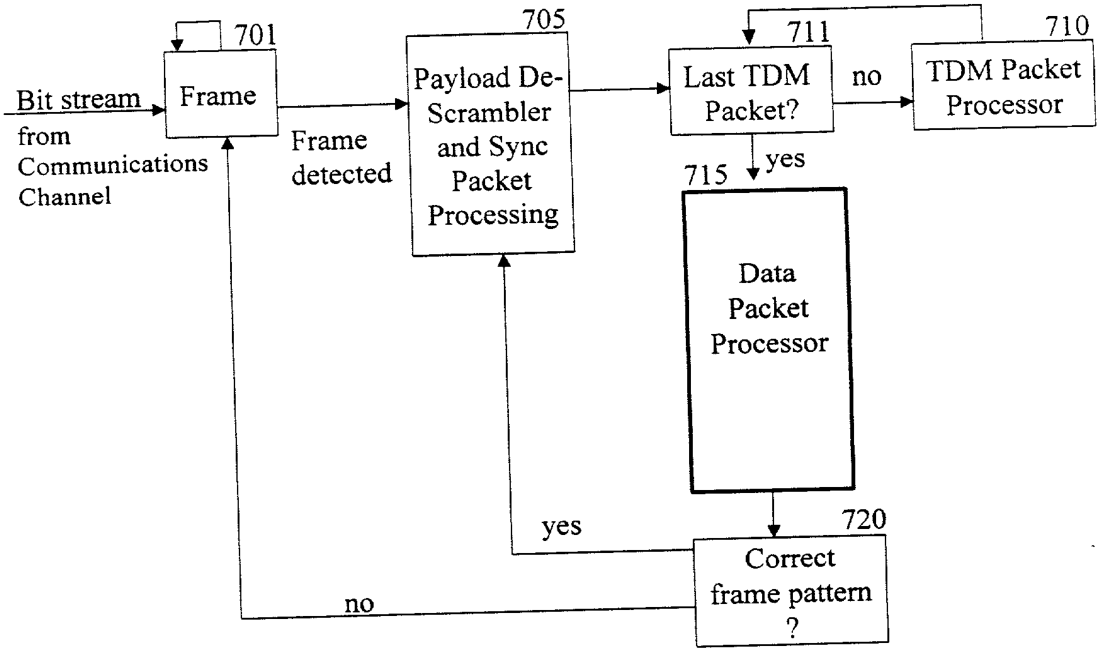


FIG. 8: Data Packet Processor

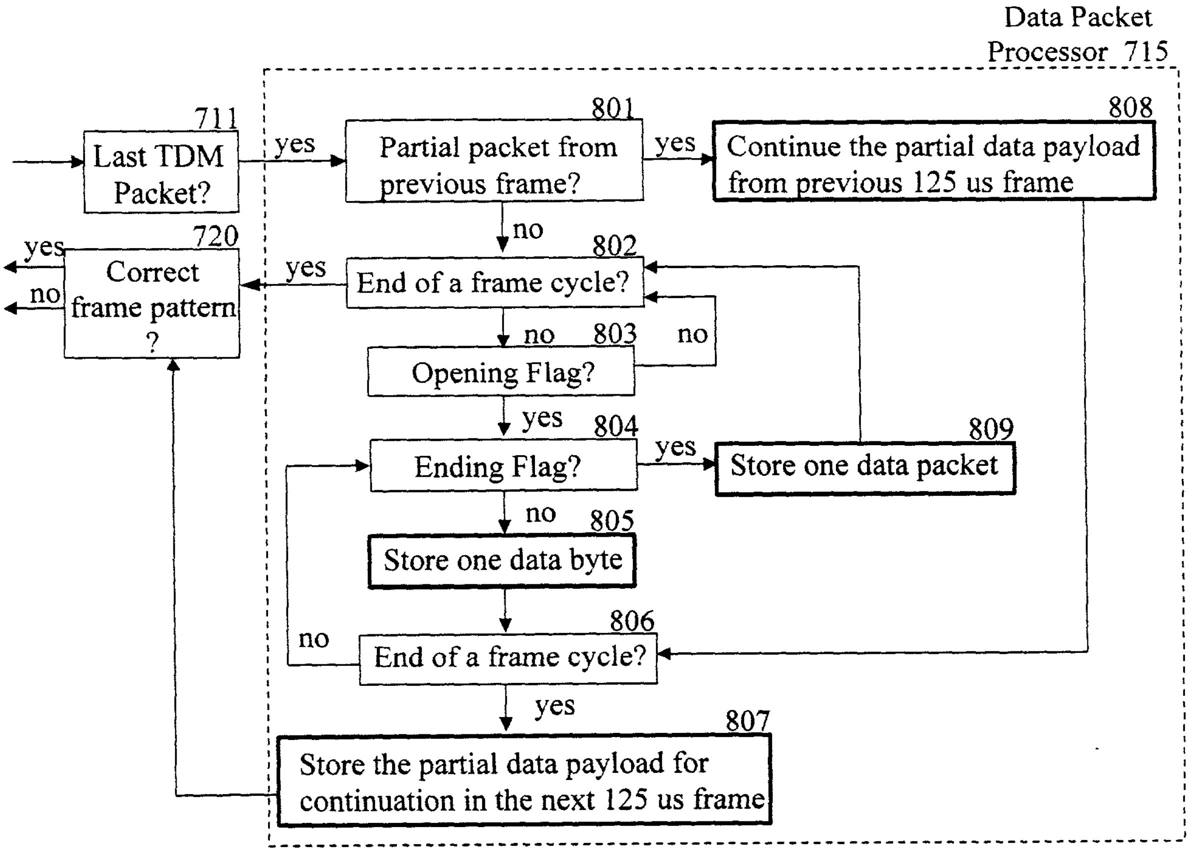


FIG. 9: Synchronized Packet-Based Trunk Transmitter ~~Operation~~

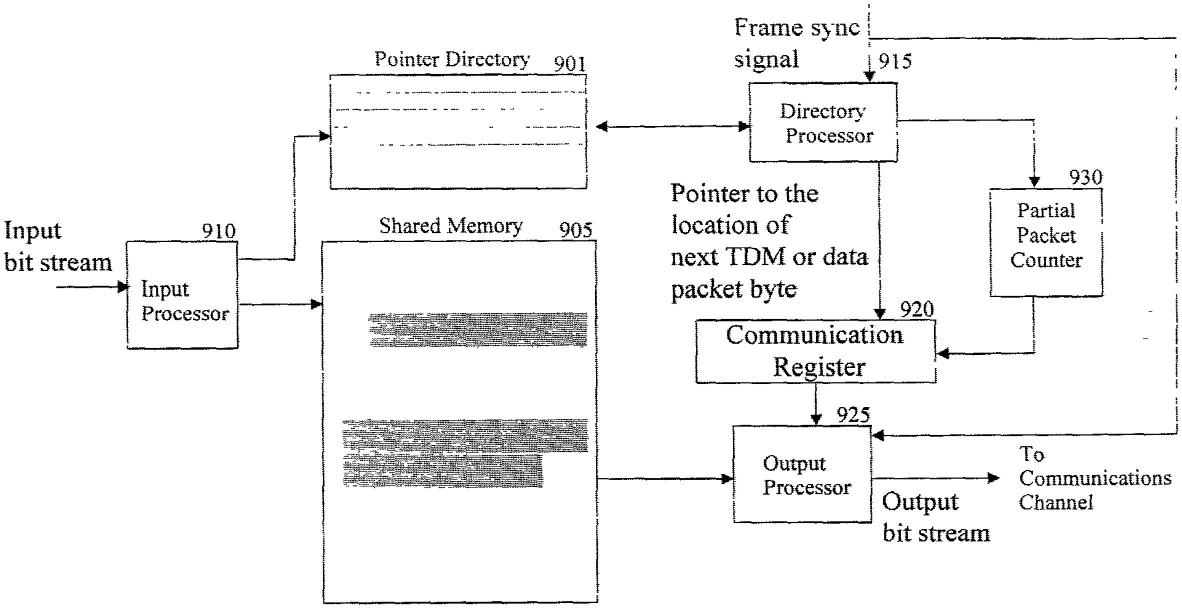
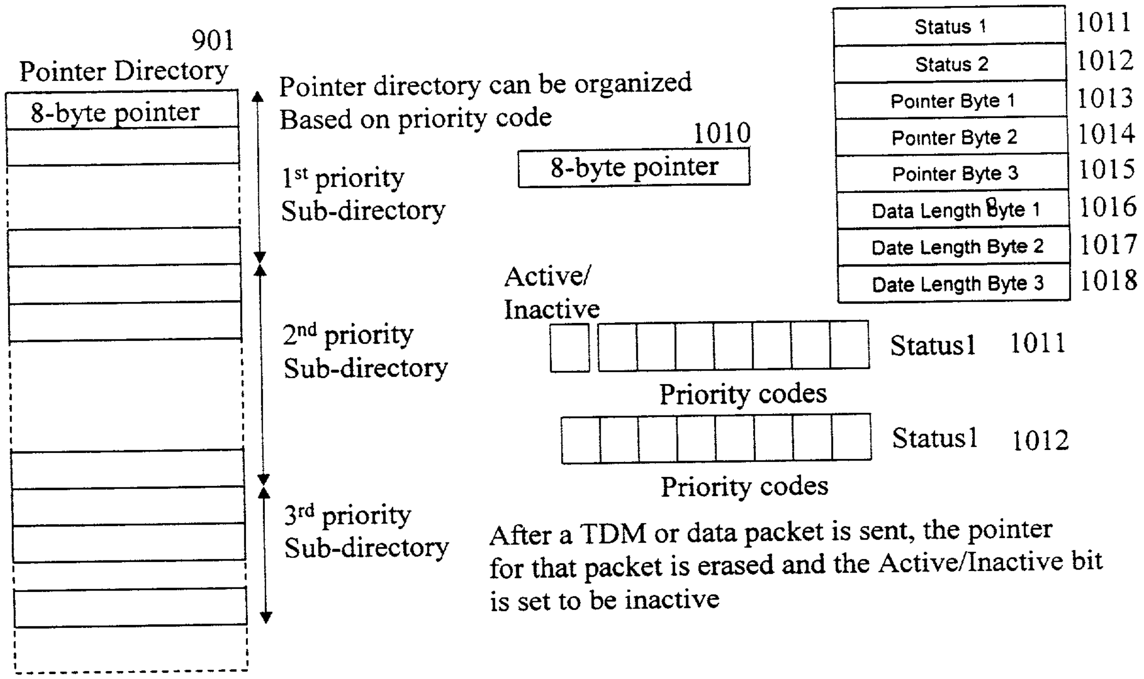


FIG. 10: Example of Pointer Directory Implementation



After a TDM or data packet is sent, the pointer for that packet is erased and the Active/Inactive bit is set to be inactive

FIG. 11: Relationship between Pointer Directory and Shared Memory

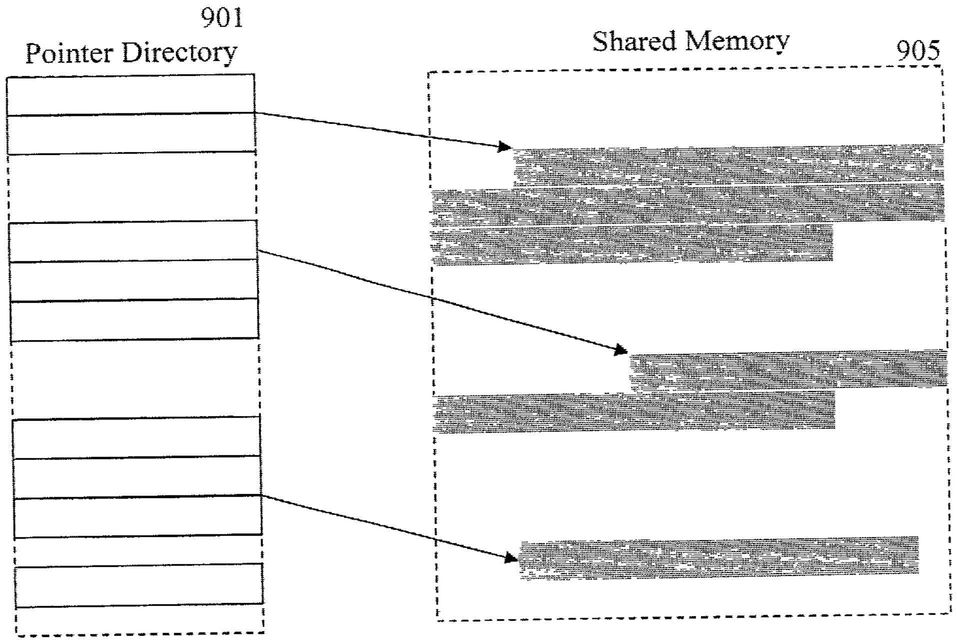


FIG. 12: Synchronized Packet-Based Input Processor

↑
Trunk

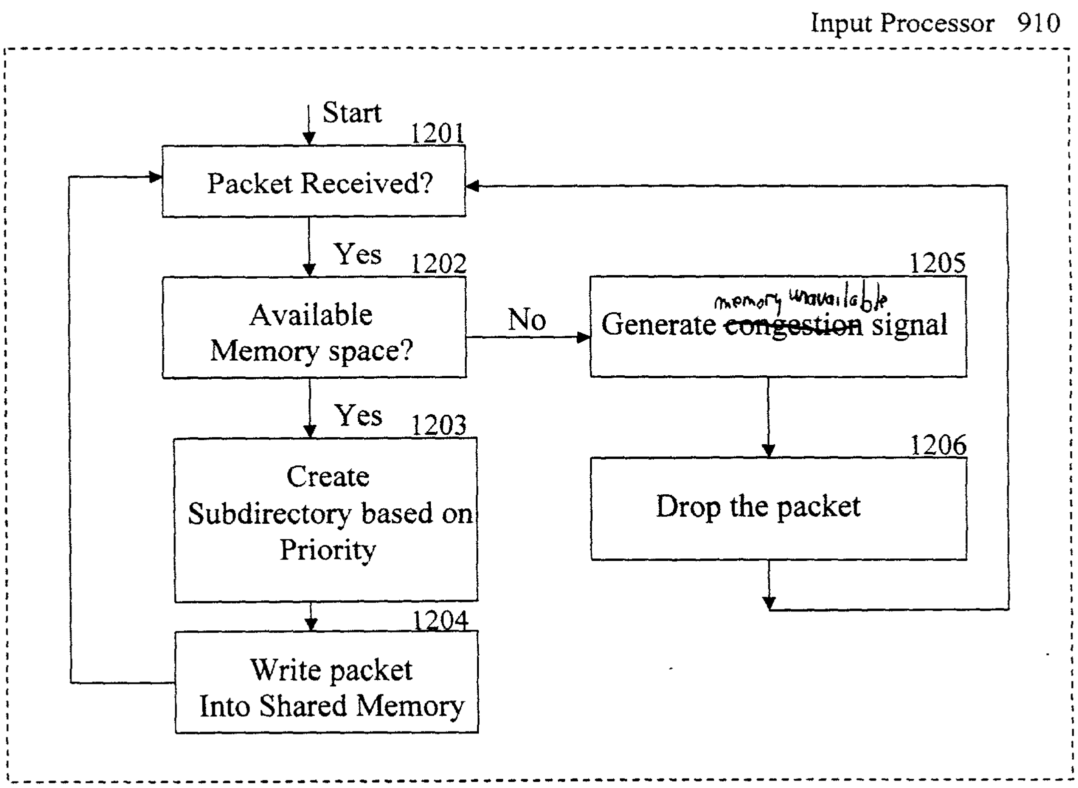


FIG. 13: Synchronized Packet-Based Trunk Directory Processor

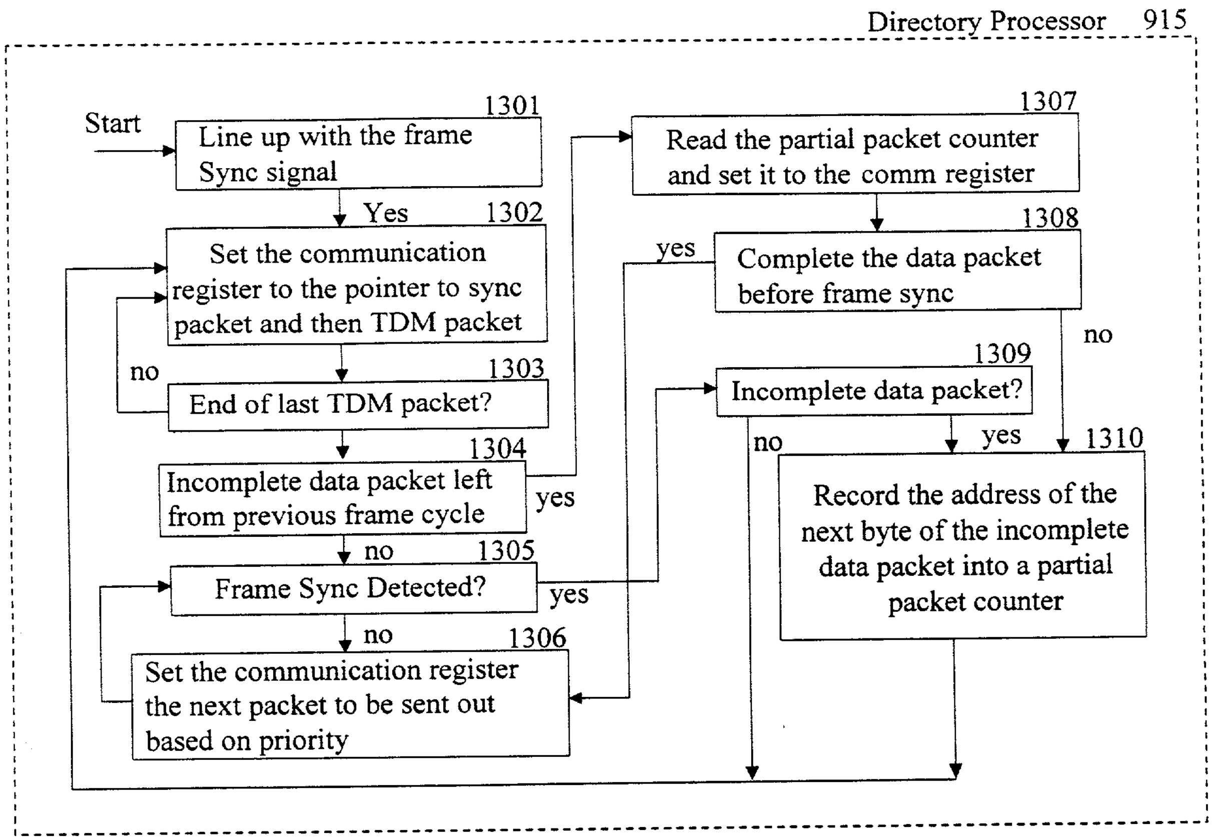


FIG. 14: Synchronized Packet-Based Trunk Output Processor

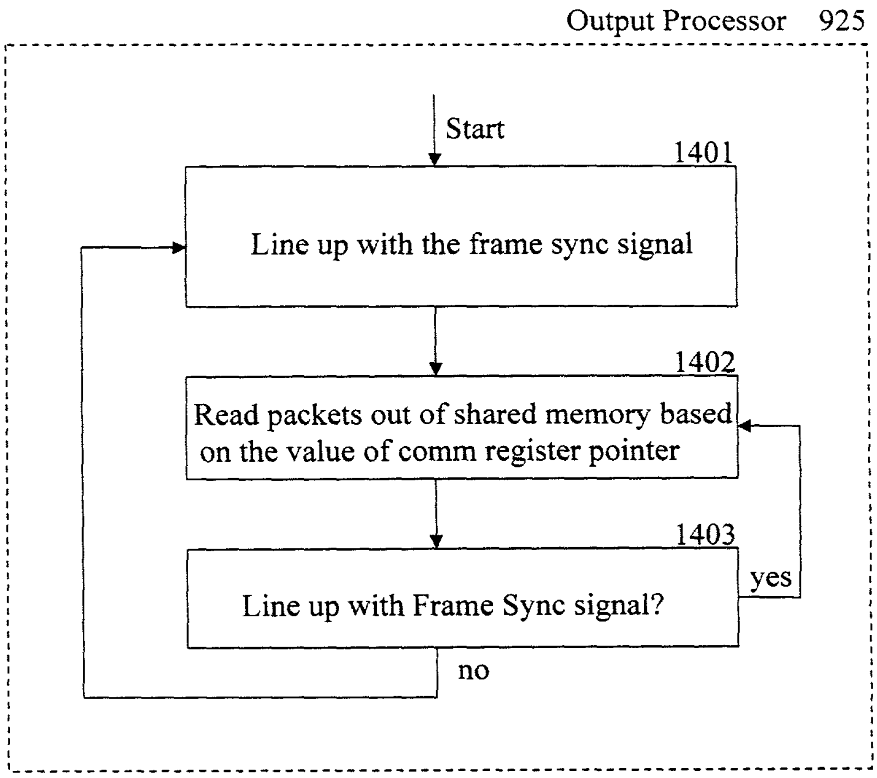


FIG. 15: Communication Ring

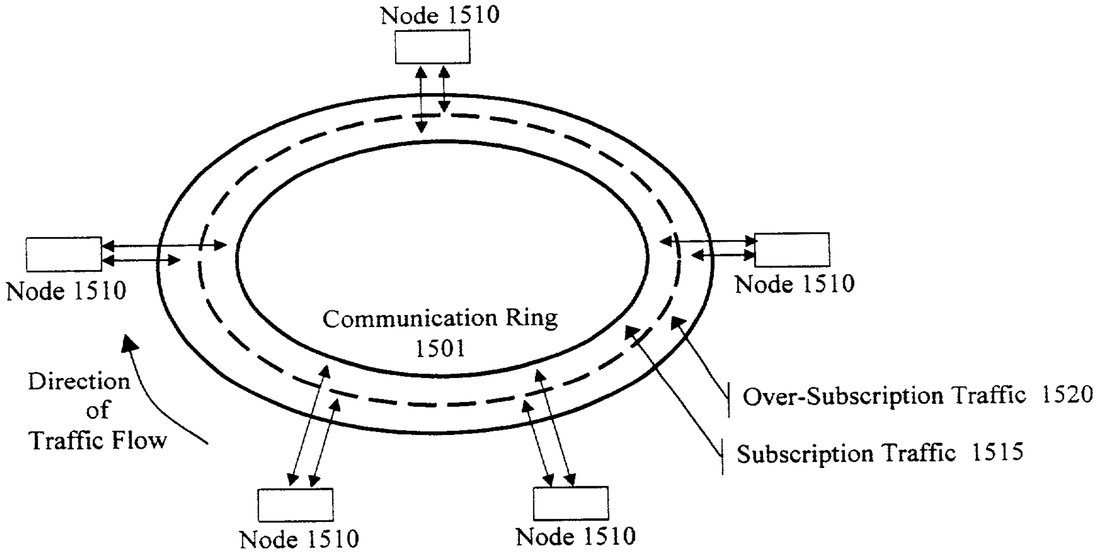


FIG. 16 Traffic Processing Stages

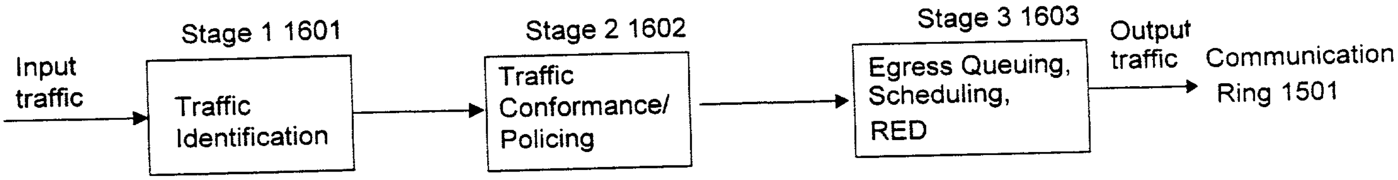


FIG. 17 Dynamic Bandwidth Sharing Traffic Processing

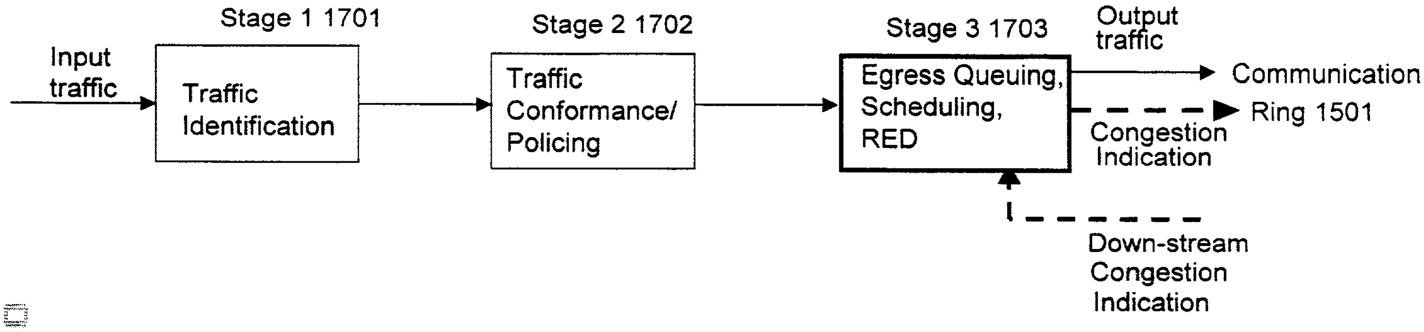


FIG. 18 Dynamic Bandwidth Sharing Traffic Processing Functional Diagram

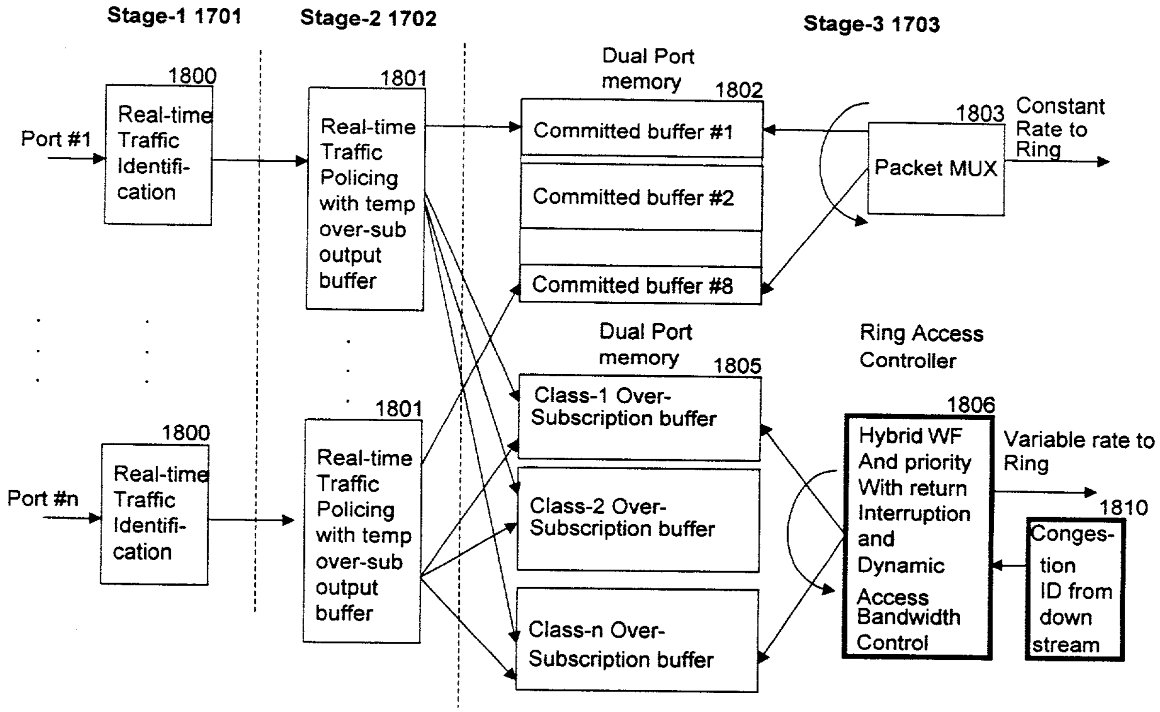


FIG. 19 Example of Traffic Identification Table

Traffic Identification Table 1901

Ethernet port #2	Based on per port contract VBR- nrt traffic, mean rate 2 Mb/s, Normal burst size 500 bytes, Excess burst size 1500 bytes
Ethernet port #4	Based on per DSCP contract TOSxxx : VBR- nrt . mean rate 4 Mb/s Normal burst size 128 bytes Excess burst size: 500 bytes TOSyyy : PCR, mean rate 64 Kb/s, Delay variation 50 us

FIG. 20 Dynamic Bandwidth Sharing Stage 2 Processing

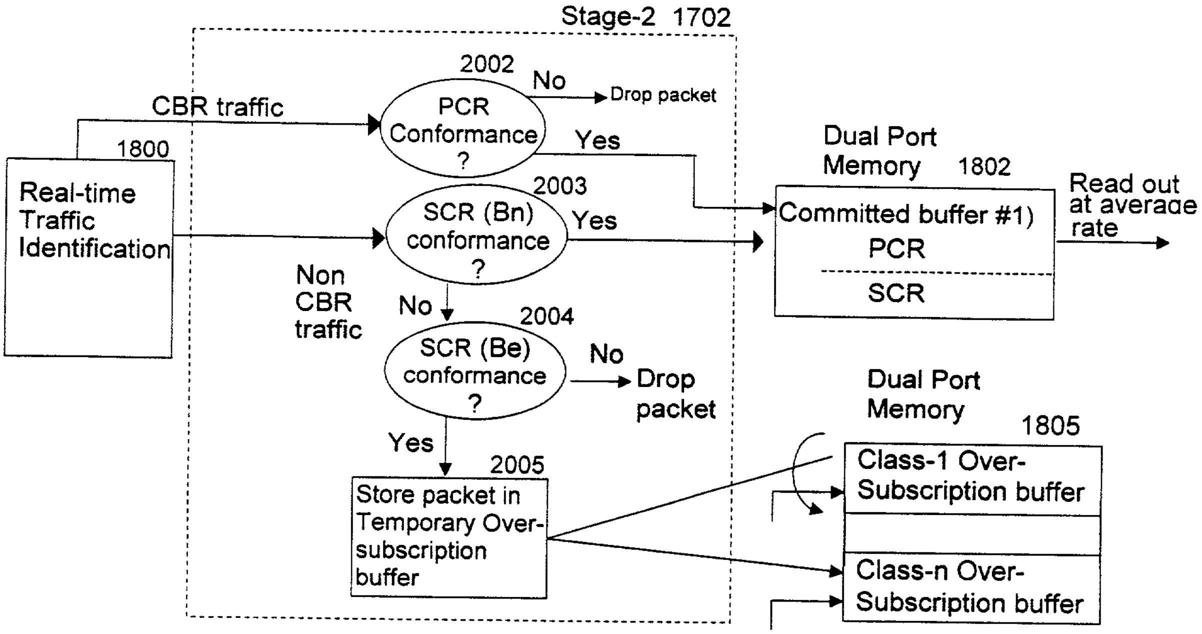


FIG. 21 Dynamic Bandwidth Sharing Stage 3 Processing

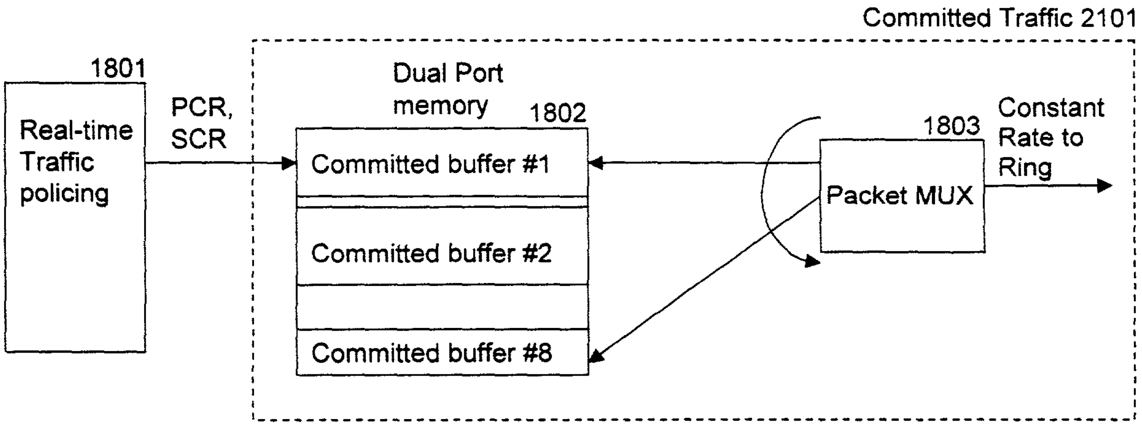


FIG. 22 Dynamic Bandwidth Sharing Stage 3 Processing

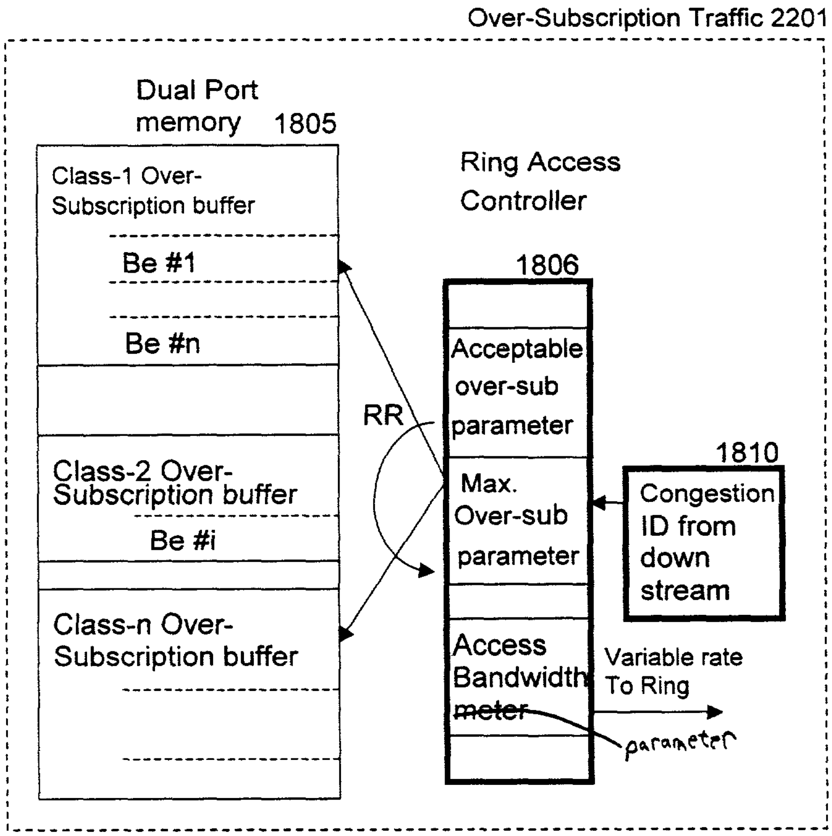


FIG. 23 Dynamic Bandwidth Sharing Congestion Control

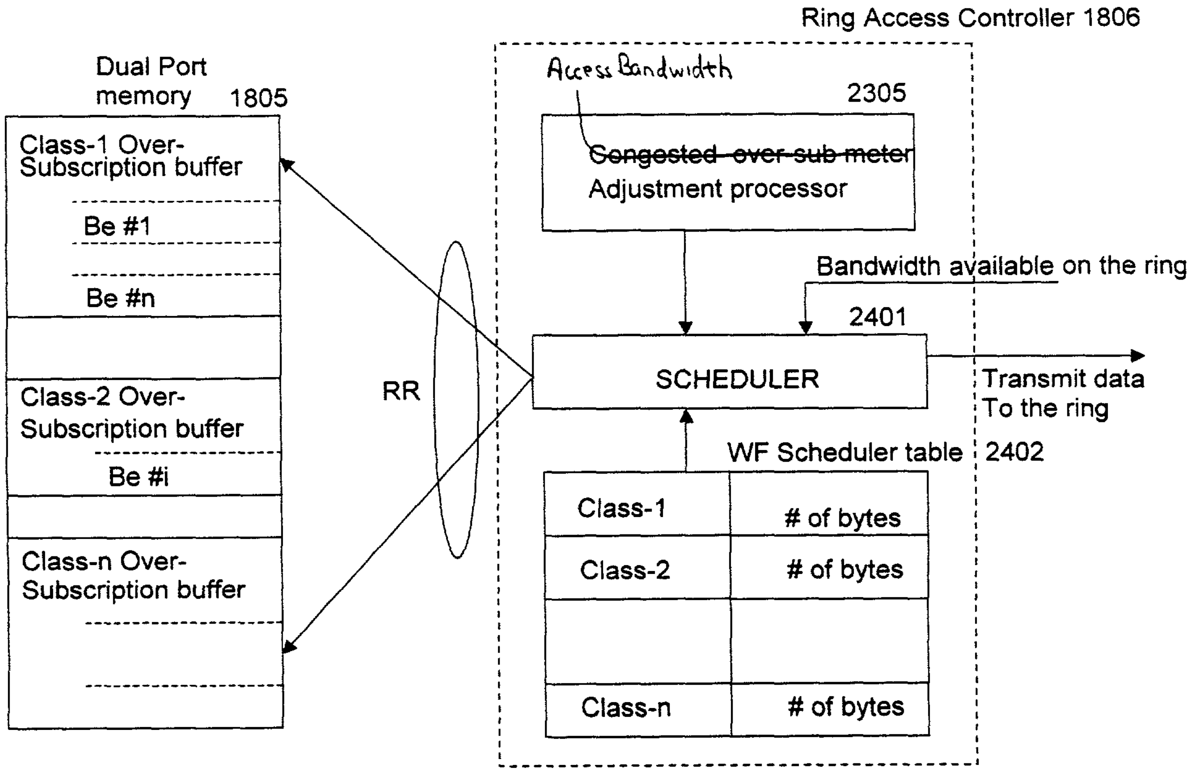


FIG. 24 Dynamic Bandwidth Sharing